

U.S. Patent Application Serial No. 10/523,034

Response filed May 7, 2007

Reply to OA dated February 8, 2007

**AMENDMENTS TO THE CLAIMS:**

Please cancel claims 5, 10 and 12 without prejudice or disclaimer, and amend claims 1-4 and 7-9 as follows:

Claim 1 (Currently Amended): A flower thinning agent which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,

the inorganic compound being at least one kind selected from silicate mineral, calcium carbonate, zeolite, magnesium phosphate, and magnesium carbonate, and

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships of (a), (b) and (c):

(a)  $0.03 \leq P \leq 30$

(b)  $3 \leq Q \leq 800$

(c)  $0.5 \leq Q/P \leq 1000$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method.

Claim 2 (Currently amended): A flower thinning agent which comprises a preparation of a

mixture of an inorganic compound of poor water solubility with an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships (d), (e) and

(f) :

$$(d) 0.03 \leq P \leq 10$$

$$(e) 7 \leq Q \leq 300$$

$$(f) 0.5 \leq Q/P \leq 300$$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method.

Claim 3 (Currently amended): A flower thinning agent which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships (g), (h) and

(i) :

$$(g) 0.03 \leq P \leq 5$$

$$(h) 10 \leq Q \leq 200$$

$$(i) 1 \leq Q/P \leq 150$$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method.

Claim 4 (Currently Amended): A flower thinning agent according to any one of claims 1 to 3, which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships of (j), (k) and (l):

$$(j) 0.5 \leq D_{ys} \leq 10$$

$$(k) 0.002 \leq D_{xs} \leq 10$$

$$(l) 0.5 \leq D_{ys}/D_{xs} \leq 300$$

$D_{ys}$ : point (ml/g) when mercury penetration increment (Log Differential Intrusion) becomes maximum in a mercury penetration method

$D_{xs}$ : average pore diameter ( $\mu\text{m}$ ) of  ~~$D_{ys}$~~  the flower thinning agent as measured by a mercury penetration method

$D_{ys}/D_{xs}$ : amount of average pore diameter.

Claim 5 (Canceled).

Claim 6 (Previously presented): A flower thinning agent according to any one of claims 1 to 3, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.

Claim 7 (Currently Amended): A flower thinning agent which comprises ~~a preparation of~~  
~~a mixture of an inorganic compound of poor water solubility~~ comprising calcium phosphate ~~with and~~  
an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships of (a), (e),  
(m) and (n):

$$(a) 0.03 \leq P \leq 30$$

$$(e) 3 \leq Q \leq 300$$

$$(m) 0.01 \leq R \leq 30$$

$$(n) 0.5 \leq S \leq 300$$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size  
distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption  
method/ specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles  
measured by electron micrograph.

Claim 8 (Currently Amended): A flower thinning agent which comprises ~~a preparation of~~  
~~a mixture of an inorganic compound of poor water solubility~~ comprising calcium phosphate ~~with and~~

an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships of (a), (e),

(o) and (t):

(a)  $0.03 \leq P \leq 30$

(e)  $3 \leq Q \leq 300$

(o)  $0.01 \leq R \leq 10$

(t)  $0.5 \leq S \leq 100$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method/ specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles measured by electron micrograph.

Claim 9 (Currently Amended): A flower thinning agent which comprises ~~a preparation of~~ a mixture of ~~an inorganic compound of poor water solubility~~ comprising calcium phosphate ~~with and~~ an additive,

wherein the flower thinning agent satisfies ~~satisfying~~ the following relationships of (a), (e),

U.S. Patent Application Serial No. 10/523,034

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(u) and (v) :

$$(a) 0.03 \leq P \leq 30$$

$$(e) 3 \leq Q \leq 300$$

$$(u) 0.01 \leq R \leq 5$$

$$(v) 0.5 < S \leq 10$$

P: average particle diameter ( $\mu\text{m}$ ) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method

R: average particle diameter ( $\mu\text{m}$ ) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q ( $\text{m}^2/\text{g}$ ) measured according to the nitrogen adsorption method/ specific surface area Q1 ( $\text{m}^2/\text{g}$ ) calculated from average particle diameter R of particles measured by electron micrograph.

Claim 10 (Canceled).

Claim 11 (Previously Presented): A flower thinning agent according to any one of claims 1-3 and 7-9, wherein an amount of the additive is 0.005 to 200 parts by weight per 100 parts by weight of the inorganic compound of poor water solubility.

U.S. Patent Application Serial No. **10/523,034**

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Claim 12 (Canceled).

Claim 13 (Previously Presented): A flower thinning agent according to claim 4, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.